



UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office

Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231

AS

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
-----------------	-------------	----------------------	---------------------

09/526,379 03/16/00 WOO

L 1417Y P 418

IM22/0828

EXAMINER

MARK J BUONAIUTO ESQ
BAXTER INTERNATIONAL INC
LAW DEPARTMENT
ONE BAXTER PARKWAY DF2 2E
DEERFIELD IL 60015

NOLAN, S

ART UNIT

PAPER NUMBER

1772

DATE MAILED:

08/28/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.

09/526,379

Applicant(s)

WOO ET AL.

Examiner

Sandra M. Nolan

Art Unit

1772

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-41 is/are pending in the application.
- 4a) Of the above claim(s) 4-8 and 26-30 is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 9-25 and 31-41 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☒ Claim(s) 1-41 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). ____
- 2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3. 6) ☐ Other: _____

DETAILED ACTION

Election/Restriction

1. This application contains claims directed to the following patentably distinct species of the claimed invention: containers including a sidewall made of a layer containing an ethylene copolymer and/or ionomer with either:

Species I: a copolymer of ethylene and propylene; or

Species II: a blend of two propylene-containing copolymers.
2. Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Claims 1, 2, 9-17, 21, 22, and 31-41 are generic.
3. Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.
4. Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

5. Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

6. During a telephone conversation with Mr. Joseph Fuchs on August 24, 2001, a provisional election was made with traverse to prosecute the invention of species I, claims 3 and 25. Affirmation of this election must be made by applicant in replying to this Office action. Claims 4-8 and 26-30 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

7. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a petition under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

8. Claims 4-8 and 26-30 are withdrawn as non-elected. Claims 1, 2, 9-17, 21, 22, and 31-41 are generic claims and will be examined to the extent that they are readable on the elected species.

Information Disclosure Statement

9. The information disclosure statement submitted on October 2, 2000 (Paper No. 3) was considered by the examiner. A copy of the initialed IDS form is enclosed.

It is noted, however, that the following listed items were not considered by the examiner (numbers appear to the left of the citations on the enclosed form):

Items 8, 13, 23, 81, 127, and 133 among the US patents were not considered because no copies of the patents were provided.

Items 147 and 150 among the non-US citations were not considered because no English translations or statements re: relevance were provided.

Claim Rejections - 35 USC § 112

10. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

- W/D.* 11. Claims 2, 9-15, 24, and 31-37 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The language of claims 1 and 21 states that certain polymeric ingredients may or may not be present. That is, it says "selected from the group of" for ingredients in the first component and "consists of one or more polymers of the group" for ingredients in the second component. Thus, the claims rejected all describe ingredients that may or may not be present in the film that makes up the claimed containers.

For example, claims 2 and 24 define the propylene containing copolymer that is the first (1), listed option for the ingredients in the second component of the film.

However, the second component need not contain a propylene containing copolymer.

The same is true for the cyclic olefin polymers (claims 9-10 and 31-32); the bridged cyclic hydrocarbon polymer (claims 11-12 and 33-34), and the ethylene/alpha-olefin copolymer (claim 13-15 and 35-37).

Please clarify the language in the claims to indicate that the polymers described therein are actually present in the embodiments that the claims are intended to cover.

For instance, it is suggested that claim 2 be revised to say "The container of claim 1 wherein the second component contains a propylene containing polymer, which propylene containing polymer is selected from . . ."

Please correct the claims.

Claim Rejections - 35 USC § 103

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

13. Claims 1-3, 16, and 21-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Aoyagi et al (US 4,453,940) in view of Chundury et al (US-5,601,889).

Aoyagi et al teaches that blood bags and fluid supply bags (col. 1, lines 20+) can be made from polymeric materials containing ethylene-vinyl acetate ("EVA") copolymers (col. 3, lines 53+). The bags are sealed along the peripheral edges (col. 5, lines 25+ and 39+ and Figure 1, feature 11a). Aoyagi et al teaches that the bags are crosslinked with electron beam radiation (abstract), with dosages of radiation chosen depending upon the kind of polymer used and the desired degree of crosslinking (col. 4, lines 44+).

The Examiner takes official notice that bags are containers.

Aoyagi et al do not teach blends of EVA copolymers with propylene-ethylene copolymers.

Chundury et al teaches blends of 55% or more of EVA copolymers (col. 3, line 29) with 15-60% of a propylene-ethylene copolymer (col. 4, lines 15+), which propylene-ethylene copolymer contains 1 to 6% ethylene (col. 3, lines 52+). The blends are used to make bags (abstract, col. 2, lines 37-38) and are crosslinkable with electron beam radiation (col. 4, lines 57-58). The blends produce articles that are environmentally safe (col. 2, lines 49-54).

Both Aoyagi et al and Chundury et al deal with the production of electron beam irradiated bags that contain EVA copolymers.

It would have been obvious to one having ordinary skill in the art at the time that the invention was made to employ the EVA/propylene-ethylene copolymer blends of Chundury et al in place of the EVA copolymers in making the bags of Aoyagi et al in order to produce bags that are safe for the environment and to irradiate them with

electron beams at suitable levels to crosslink the bags, as taught by Aoyagi et al and Chundury et al.

The motivation to employ the EVA/propylene-ethylene copolymer blends of Chundury et al in place of the EVA copolymer used to make the bags of Aoyagi et al is found at col. 2, lines 49-54 of Chundury et al, where the environmental safety of articles made using the patented blends is discussed. It is deemed desirable to produce bags that are environmentally safe in order to minimize harm to the environment caused by the degradation products of some plastics, such as the chlorine released by chlorine-containing plastics.

It would be a matter of engineering choice to select suitable polymers for use in the components of the films suggested by Aoyagi et al and Chundury et al to yield the elasticity, haze, adhesion, creep and heat sealability properties recited in Applicants' claims 1 and 22.

14. Claims 17-20 and 38-41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Aoyagi et al and Chundury et al as applied to claims 1-3, 16, and 21-25 above, and further in view of Barney et al (US 6,203,535 B1, filed 11-10-98).

Aoyagi et al and Chundury et al are discussed above.

Neither patent teaches peelable seals and compartments in its bags.

Barney et al teaches compartments separated by peelable seals in containers (note the compartmentalized bags in Figures 1 and 2) made from blends of EVA copolymers with propylene-ethylene copolymers (abstract). The bags have sealed peripheral edges (col. 4, lines 8-11). The bags are crosslinkable with electron beams

Art Unit: 1772

(col, 4, lines 57-58). The seals and compartments are used for separately storing materials in the compartments and delivering mixtures of same by manipulating the bags to rupture the seals and mix the contents of the compartments (abstract).

It would have been obvious to one having ordinary skill in the art at the time that the invention was made to employ the compartments and peelable seals of Barney et al when designing bags based on the combined teachings of Aoyagi et al and Chundury et al in order to tailor the bags to house materials that need to be stored separately, then mixed just before delivery.

The motivation to employ the compartments and peelable seals of Barney et al when making the bags suggested by Aoyagi et al and Chundury et al is found in the Abstract of the Barney et al patent, where the manipulation to mix and deliver the contents of the compartmentalized, sealed bags is taught. It is deemed desirable to store and mix materials inside separate compartments in bags to insure that the materials remain stable/sterile until their mixtures are needed.

The location of the peelable seals on the bags resulting from the combination of the Barney et al, Aoyagi et al and Chundury et al teachings is a matter of design choice, depending upon the skilled artisan's desire to have the peelable seals rupture at certain locations in/on the bags.

Barney et al discloses the claimed invention except for the locations of the seals in claims 18-20 and 39-41. It would have been obvious to one having ordinary skill in the art at the time the invention was made to place the peelable seals wherever

rupturability is desired, since it has been held that rearranging parts of an invention involves only routine skill in the art. *In re Japikse*, 86 USPQ 70.

15. Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over Aoyagi et al and Chundury et al as applied to claims 1-3, 16, and 21-25 above, and further in view of Occhiello et al (EPO 0423499A2).

The Aoyagi et al and Chundury et al patents are discussed above.

Neither patent teaches the irradiation of polymeric materials with electron beams in the presence of oxygen.

Occhiello et al teaches that the surfaces of polymeric articles can be irradiated with electron beams in the presence of oxygen at certain partial pressures (page 1, lines 45-48). The electron beam/oxygen treatment enhances the printability of the treated films (page 2, lines 44-45).

It would have been obvious to one having ordinary skill in the art at the time that the invention was made to employ the electron beam/oxygen treatment of Occhiello et al at appropriate dosage/pressure levels in order to enhance the printability of the bags suggested by the combination of Aoyagi et al and Chundury et al.

The motivation to employ the electron beam/oxygen treatment of Occhiello et al to enhance the printability of the bags suggested by Aoyagi et al and Chundury et al is found at page 2, lines 44-45 of Occhiello et al, where the printability of surfaces treated with the electron beam/oxygen combination is discussed. It is deemed desirable to make bags printable in order to facilitate labelling the bags with product information.

Art Unit: 1772

Conclusion

Any inquiry concerning this communication should be directed to the examiner, Sandra M. Nolan, whose telephone number is 703/308-9545. The examiner can normally be reached on Monday through Thursday, from 6:30 am to 4:00 pm, Eastern time.

If attempts to reach the examiner by telephone are unsuccessful, her supervisor, Harold Pyon, can be reached at 703/308-4251. The fax phone number for the art unit is 703/305-5408. The telephone number for the receptionist is 703/308-0661.



S. M. Nolan
Patent Examiner
Technology Center 1700

SMN/smn
August 25, 2001
09526379(5)